

Date: Monday, 9/10/2007 1:32:07 PM
 User: Kim Johnston

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services	Drawing Name	BOLT
Job Number	34522		
Estimate Number	10372		
P.O. Number	N/A		
This Issue	9/10/2007	S.O. No.	N/A
Prsht Rev.	NC		
First Issue	N/A	Type	MACHINED PARTS
Previous Run	33735		
Written By			
Checked & Approved By			
Comment	Est. A 04.02.09	New issue	KJ/DS

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description:	
1.0	M303H0500	303 HEX BAR	
Comment:	Qty.: 0.0417 f(s)/Unit	Total : 1.6680 f(s)	
	303 HEX BAR		
	Material: AISI 303 SS 1/2" Hex Bar		
	(M303H0.500)		
	Batch: M102286 DSP 07/10/18		
2.0	HARDINGE	HARDINGE CNC LATHE SMALL	
Comment:	HARDINGE CNC LATHE SMALL		
	1-Turn D3121-21		
	2-Identify as D3121-21		
	3-Deburr break all sharp edges 0.005" to 0.010"		DSP 07/10/18 (45)
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE	
Comment:	INSPECT PARTS AS THEY COME OFF MACHINE		DSP 07/10/18 (45)
4.0	QC8	SECOND CHECK	
Comment:	SECOND CHECK		8/8 07/10/18 (45)
5.0	PACKAGING 1	PACKAGING RESOURCE #1	
Comment:	PACKAGING RESOURCE #1		
	Identify and Stock		
	Location: _____		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: PD Date: 07/10/02
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 9/10/2007 1:32:07 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BOLT

Job Number: 34522

Part Number: D312121

Job Number:



Seq. #:	Machine Or Operation:	Description :
6.0	QC21	FINAL INSPECTION/W/O RELEASE

Comment: FINAL INSPECTION/W/O RELEASE



45
D910122

Job Completion



U 9/10/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	34522
Description: Bolt	Part Number:	D3121-21
Inspection Dwg: D3121 Rev: D		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Measured by: <u>DJP</u>	Audited by: <u>J.F.</u>	Prototype Approval: N/A
Date: 07/10/18	Date: 07/10/18	Date: N/A

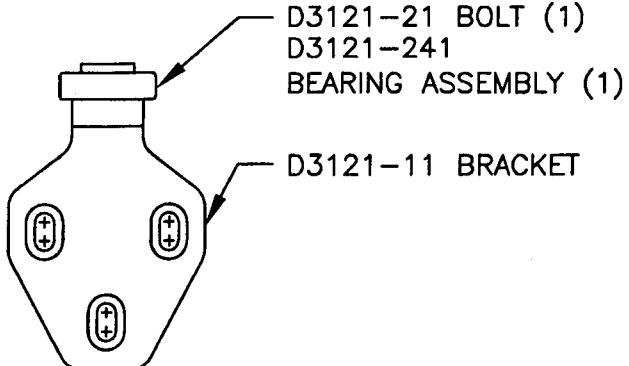
Rev	Date	Change	Revised by	Approved
A	04.02.27	New Issue	KJ/RF	
B	06.03.09	Dwg Rev. updated	KJ/JLM	
C	06.06.14	Dwg Rev. updated	KJ/JLM	✓

DART

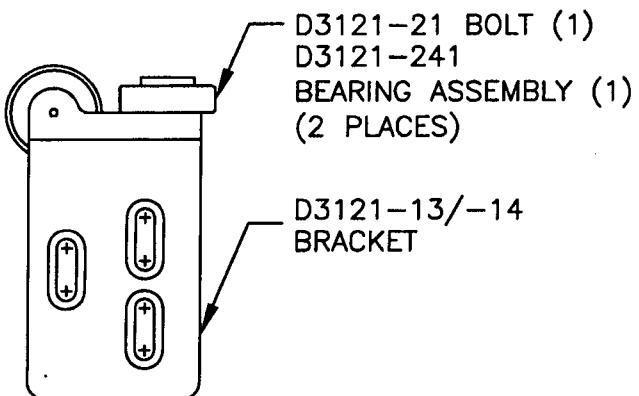
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CHECKED	APPROVED	DRAWING NO. D3121
DATE 06.05.17		SHEET 1 OF 10 TITLE SCALE BRACKET ASSEMBLY 1:2

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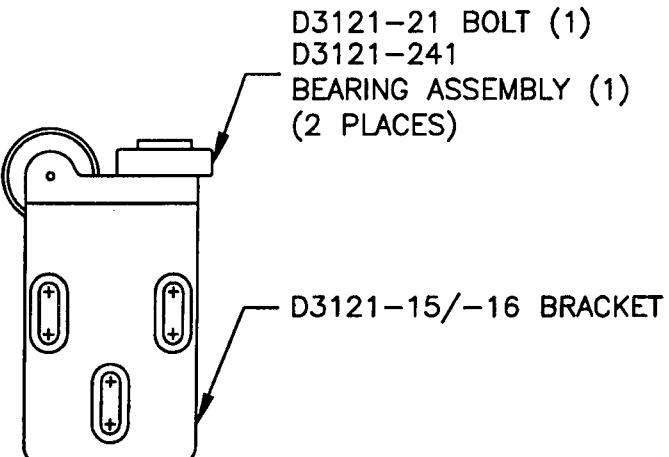
06.06.02



D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)



D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-35/-36)

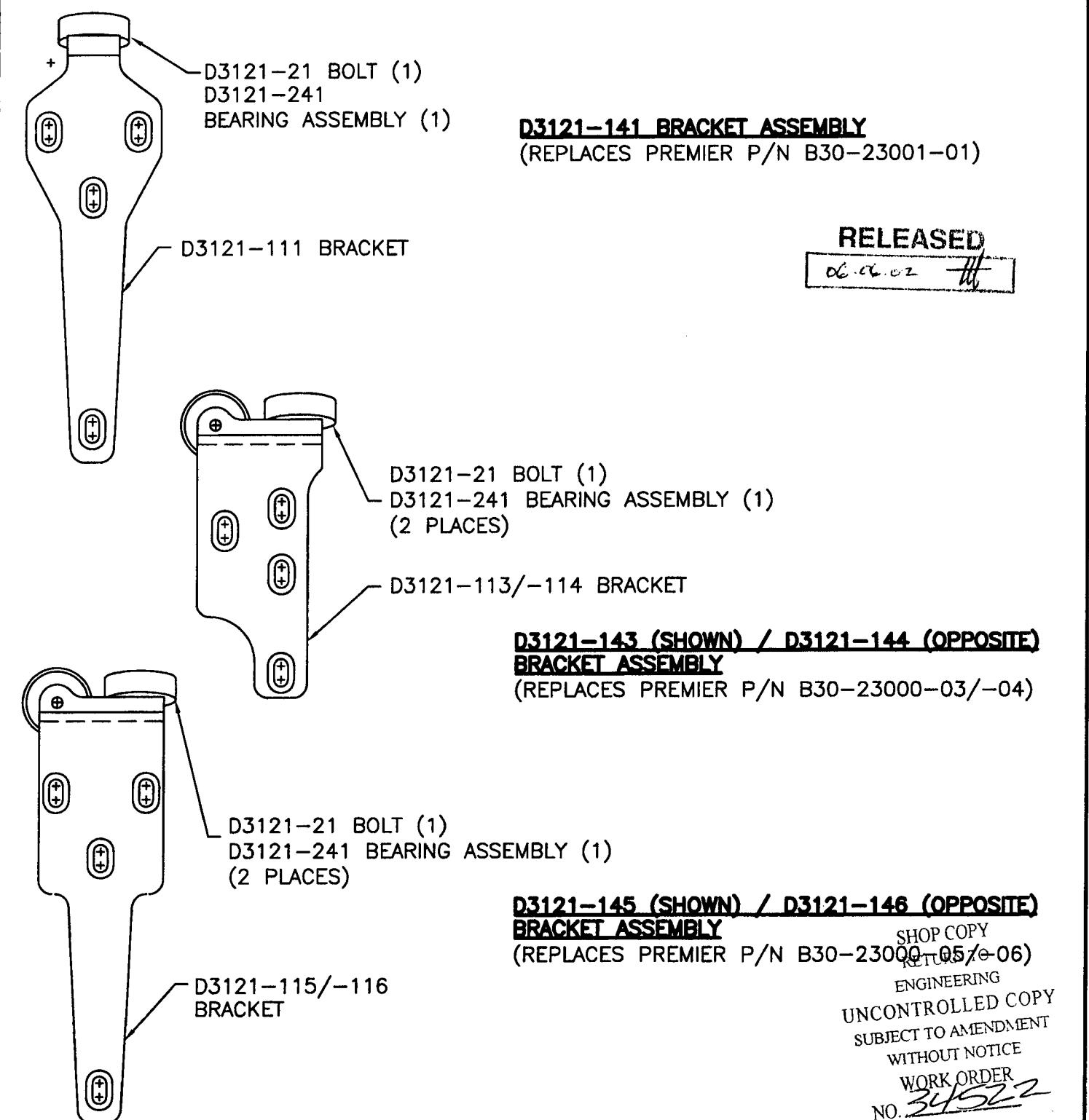
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WORK ORDER
NO. *34522*

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DATE	06.05.17	TITLE BRACKET ASSEMBLY

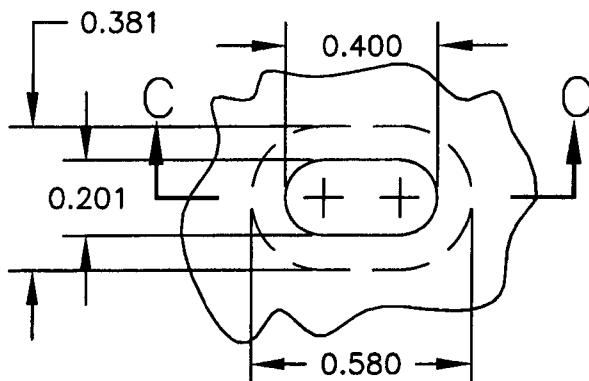
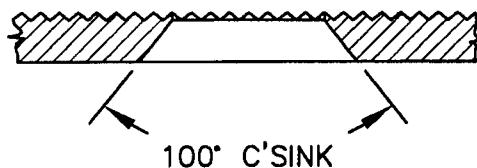
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SHEET 3 OF 10

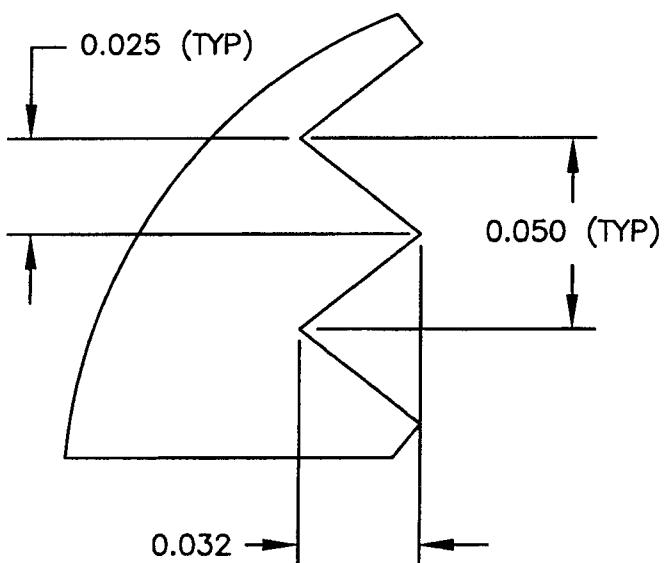
SCALE

1:1

DETAIL A:
SLOT DETAIL
SCALE 2:1
VIEW ROTATED

**SECTION
C-C**

DETAIL B:
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20



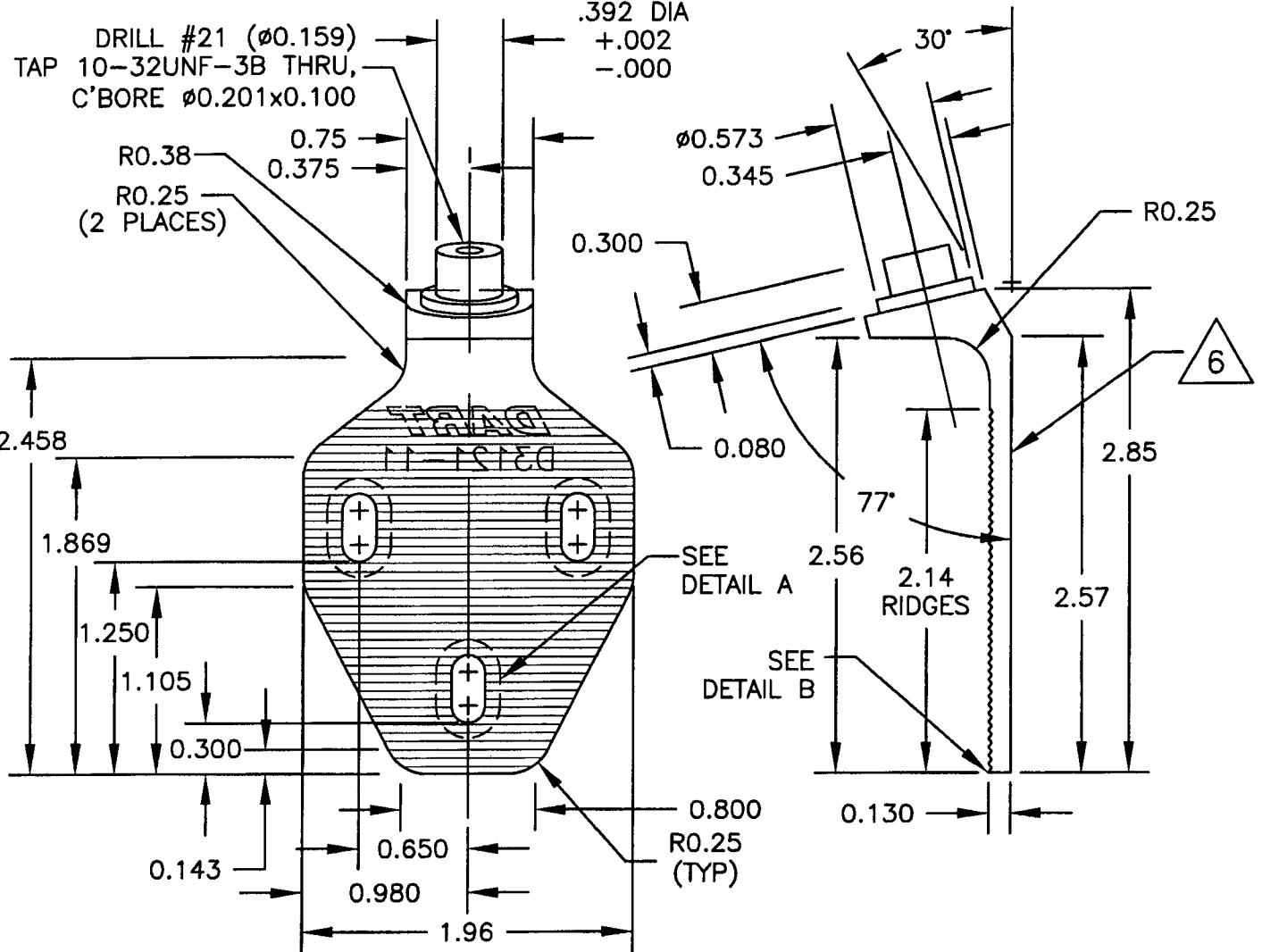
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DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:1	



D3121-11 BRACKET

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

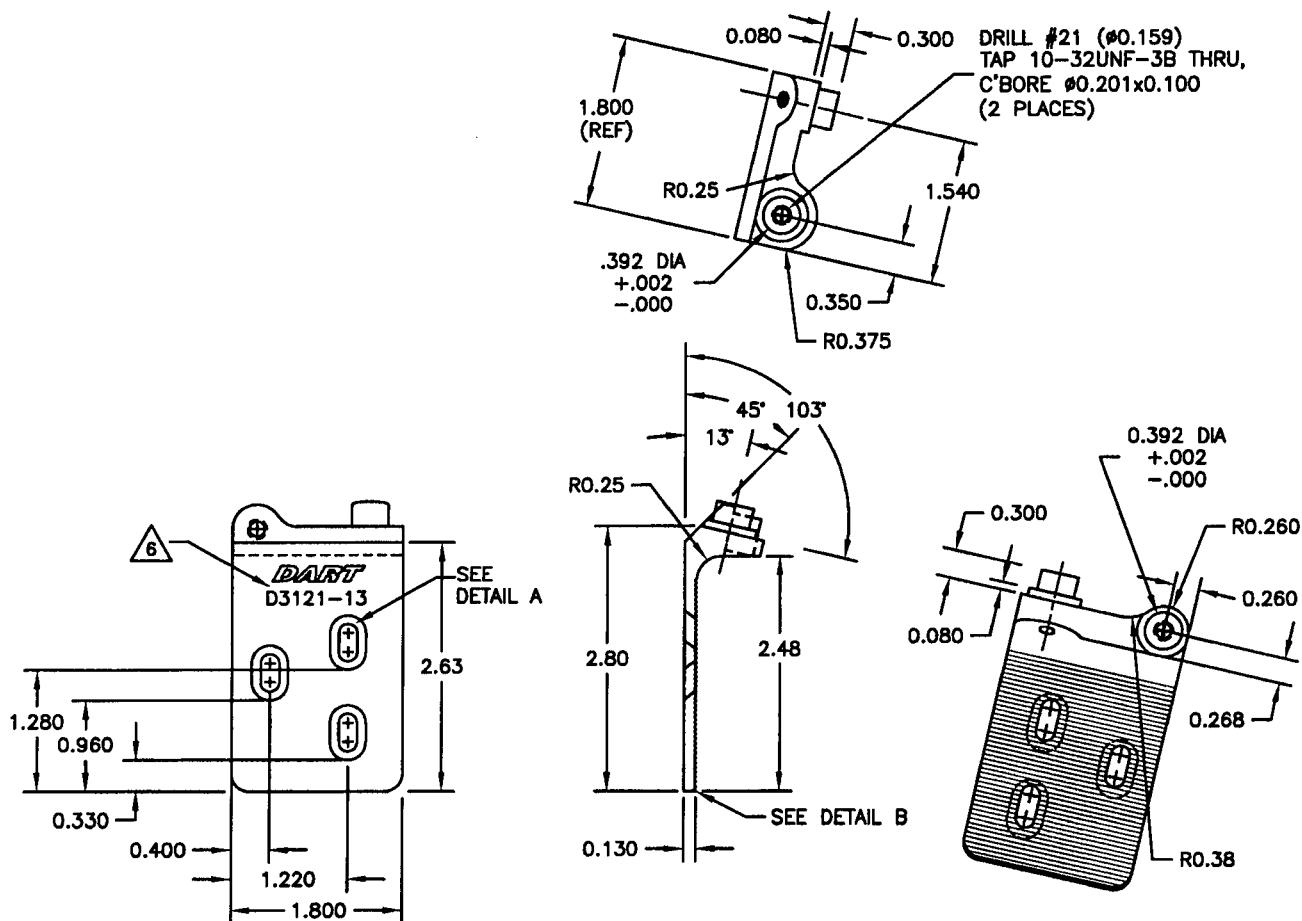
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DATE	06.05.17	D3121	SHEET 5 OF 10
		TITLE	SCALE
		BRACKET ASSEMBLY	1:2

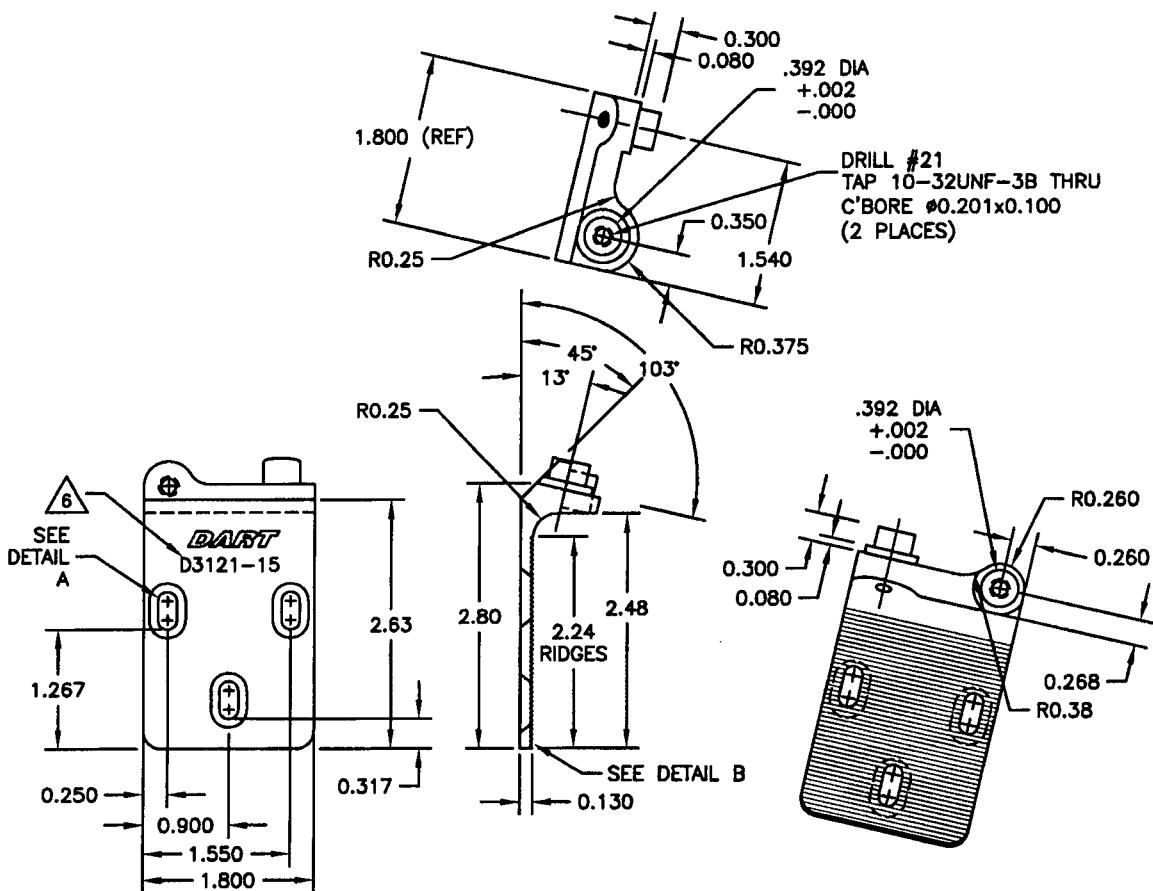
**D3121-13 BRACKET (SHOWN)****D3121-14 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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		D3121	SHEET 6 OF 10
DATE	TITLE	SCALE	1:2
06.05.17	BRACKET ASSEMBLY		

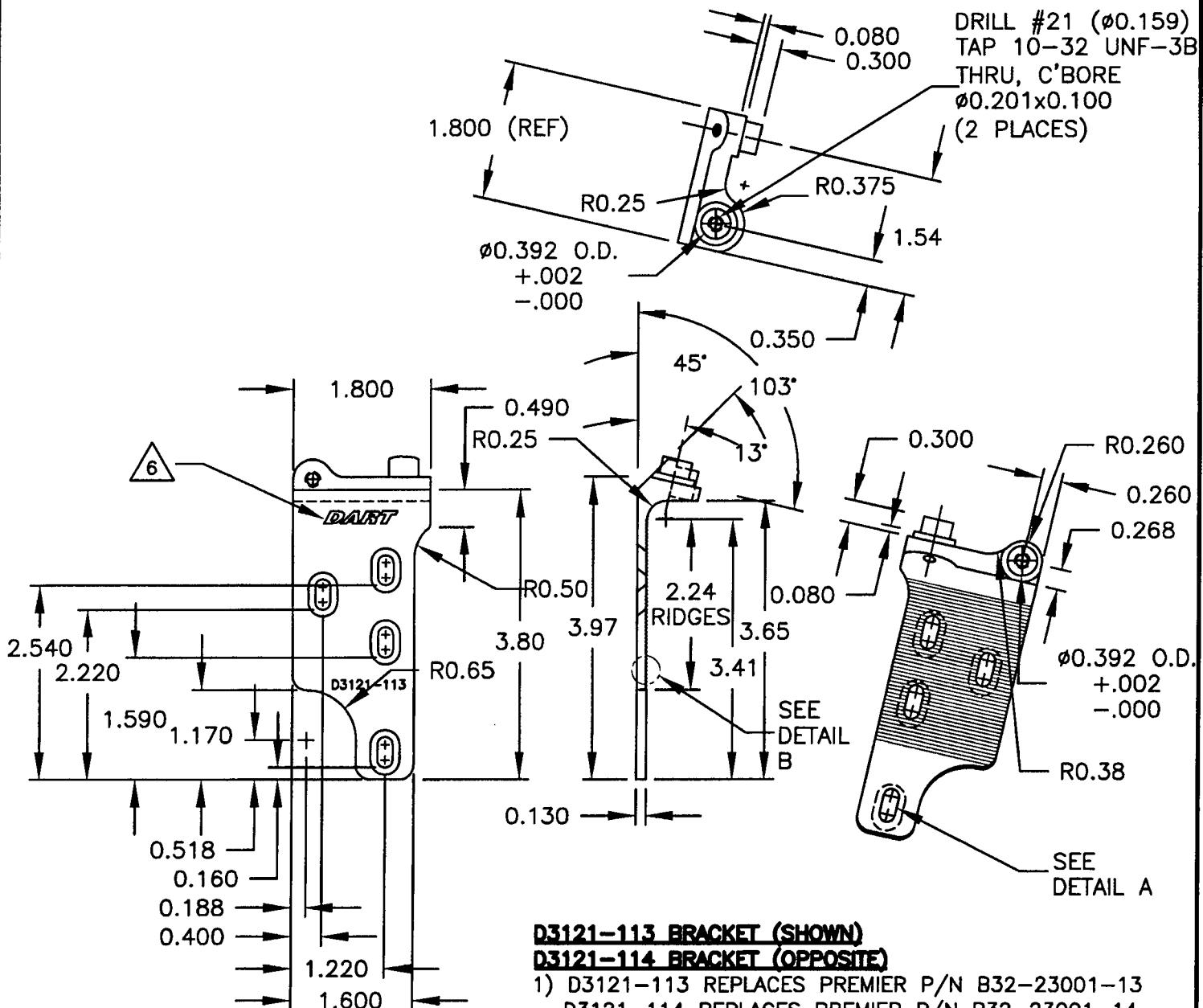
**D3121-15 BRACKET (SHOWN)****D3121-16 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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D3121-113 BRACKET (SHOWN)
D3121-114 BRACKET (OPPOSITE)

1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14

2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B) SHOP COPY

MIN ULTIMATE TENSILE STRENGTH = 150 ksi RETURN TO
MIN YIELD TENSILE STRENGTH = 100 ksi ENGINEERING

3) TOLERANCES ARE PER DART QSI 018 UNLESS CONTROLLED COPY
OTHERWISE NOTED SUBJECT TO AMENDMENT

4) ALL DIMENSIONS ARE IN INCHES WITHOUT NOTICE

5) BREAK ALL SHARP EDGES 0.005 TO 0.015 WORK ORDER

6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN NO. 34522

7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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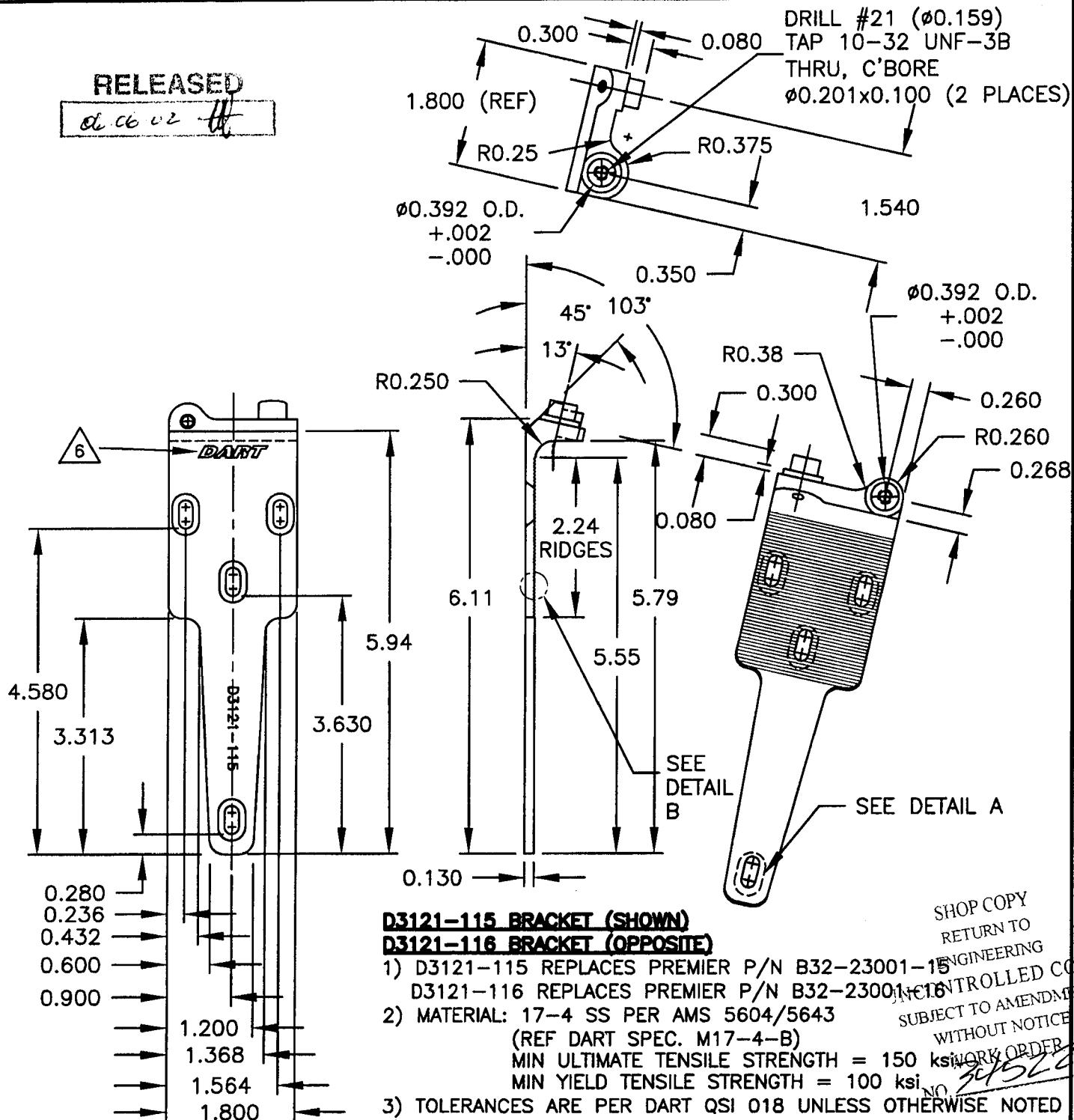
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D3121-115 BRACKET (SHOWN)
D3121-116 BRACKET (OPPOSITE)

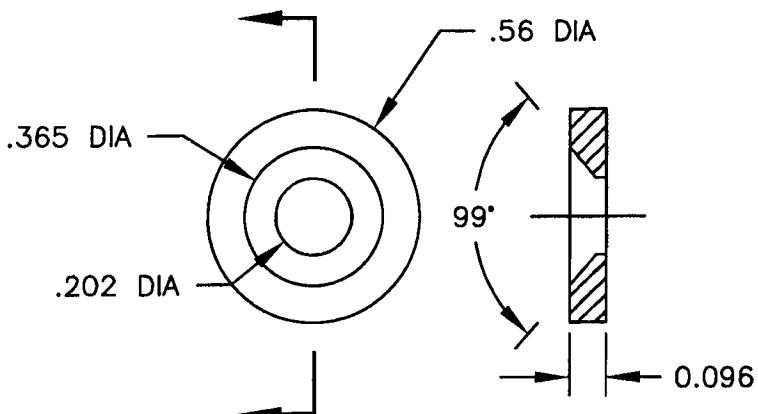
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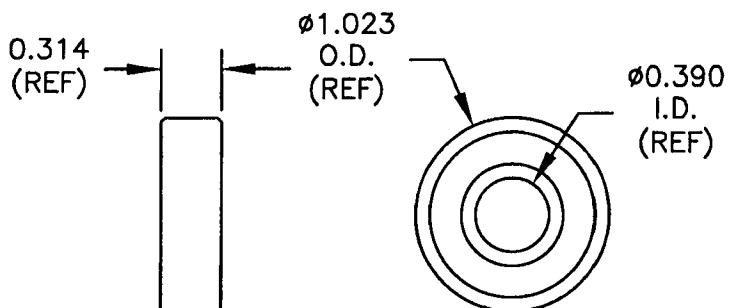
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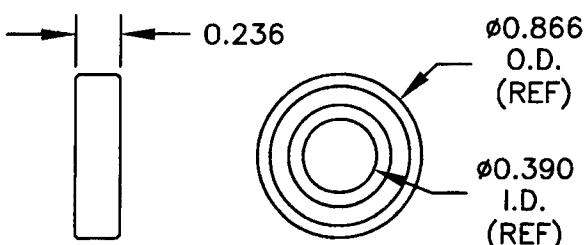
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DATE		REV. D SHEET 10 OF 10 TITLE SCALE 1:1
06.05.17		BRACKET ASSEMBLY

**D3121-17 WASHER (SCALE 2:1)**

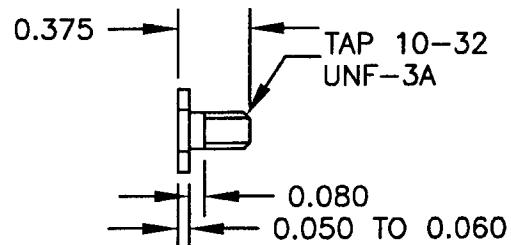
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

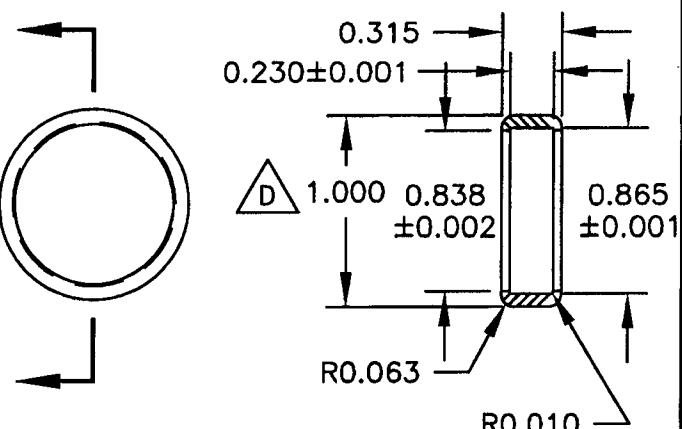
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM
FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z
OR KML P/N 6900-2Z
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

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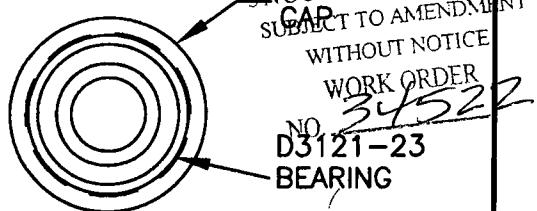
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NO. 34522

**D3121-241 BEARING ASSEMBLY (SCALE 1:1)**

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